

Remarks / Discussion of Issues

In the non-final Office action dated December 8, 2010, it is noted that claims 1-8 and 11 are pending and stand rejected.

By this response, claims 1, 6, 7, and 11 have been amended to clarify certain aspects of the claimed invention. Support for the claim amendments can be found at least at page 7, lines 17-27 and at page 8, line 20-page 9, line 4 of the specification as originally filed. No new subject matter is added.

Objections

Claim 11 is objected to because the claim allegedly does not make grammatical sense.

Applicants amend claim 11 herein for further clarification. As such, Applicants respectfully request the withdrawal of the objection of claim 11.

Rejections under 35 U.S.C. §101

Claims 1-4 and 11 stand rejected under 35 U.S.C. §101 as allegedly not reciting structure and therefore is not tied to a particular machine. Claims 6 and 7 stand rejected under 35 U.S.C. §101 as allegedly not limiting the scope of the claimed "encoder" to non-software embodiments.

Claims 1, 6, and 7 have been amended to clarify certain aspects of the claimed invention.

Claim 1 as amended is clearly tied to a particular machine. Therefore, claim 1 falls within a statutory category of invention. Claims 2-4 and 11 depend from claim 1, and as such also fall within a statutory category of invention.

Claim 6 as amended recites a "hardware encoder." Therefore, claim 6 does not include software only embodiments, and is thus statutory subject matter under 35 U.S.C. §101. Claim 7 depends from claim 6, and as such is statutory subject matter.

For the reasons set forth above, Applicants respectfully request the withdrawal of the rejections of claims 1-4, 6, 7, and 11 under 35 U.S.C. §101.

Cited Art

The art cited and applied in the present Office Action includes: U.S. Patent 6,078,328 to Schumann et al. (hereinafter referenced as "Schumann"), and U.S. Patent 7,046,260 to Frimout et al. ("Frimout").

Rejections under 35 U.S.C. §102

Claims 6-8 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Frimout.

In order for a reference to anticipate a claim, the MPEP 2131 requires the reference to teach every element of the claim. According to MPEP 2131, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

It is respectfully submitted that Frimout does not anticipate claim 6.

Applicants' independent claim 6 recites:

Device for generating a menu for a video recording medium, the menu showing a thumbnail representative of a recording on the video recording medium and being coded according to a standard using base pictures and predicted pictures, the device having a predefined intra-coded picture memory, a representative picture memory, a hardware encoder for generating an inter-coded picture based on the output of the intra-coded picture memory and containing change information between the output of the intra-coded picture and the thumbnail, and a recording unit equipped to record the predefined intra-coded picture and the inter-coded picture onto the recording medium. (Emphasis added.)

The Office Action at page 3, in the Response to Arguments section, points to Frimout at column 1, lines 28-32 for allegedly disclosing the features of "containing change information between the output of the intra-coded picture and the thumbnail." Applicants respectfully point out that the cited section of Frimout does not disclose change information between the output of the intra-coded picture and the thumbnail.

Frimout, col. 1, lines 28-58 discloses a background picture is decoded, then a key frame is decoded and scaled to a smaller size. The new menu picture is then assembled by combining the decoded background picture and the decoded and scaled key frame. In other words, the decoded scaled key frame is apparently overlaid on to the background picture.

Although Frimout discloses a menu picture generating method using a background picture and a scaled key frame, this method does not involve change information between the background picture and the scaled key frame. Instead, the scaled key frame appears to be overlaid onto the background picture to form the menu picture. Thus, Frimout does not disclose change information between the output of the intra-coded picture and the thumbnail.

Therefore, Applicants respectfully submit that the rejection of claim 6 under 35 U.S.C. §102(e) has been traversed as per MPEP 2131 and requests the withdrawal of the rejection to claim 6.

Each of dependent claims 7 and 8 depend upon and incorporate all the features of allowable claim 6. Furthermore, dependent claims 7 and 8 include additional distinguishing features. Applicants apply the above arguments from claim 6 to dependent claims 7 and 8. Thus, Applicants respectfully submit that dependent claims 7 and 8 are allowable at least by virtue of their dependency on claim 6.

Applicants respectfully submit that the rejection of claims 6-8 under 35 U.S.C. §102(e) has been traversed and respectfully request the withdrawal of the rejection of these claims.

Rejections under 35 U.S.C. §103

Claims 1-5 and 11 stand rejected as allegedly being unpatentable over Schumann in view of Frimout. Applicants respectfully traverse these rejections.

Applicants' claim 1 recites:

Method for generating a menu for a video recording medium, the menu showing a thumbnail representative or a recording on the video recording medium and being coded according to a standard using base pictures and predicted pictures, the method comprising:
starting with a predefined intra-coded picture including

predefined blocks,
generating, by a hardware encoder, an inter-coded picture having no change information for blocks of the inter-coded picture corresponding to the predefined blocks, and having change information for selected blocks containing the thumbnail, and
storing both the predefined intra-coded picture and the inter-coded picture as menu information on the video recording medium.
(Emphasis added).

In the Response to Arguments section on pages 4-6 of the Office action, the Office alleges that the combination of Schumann and Frimout discloses all elements of claim 1. The Office points to Schumann, col. 1, lines 34-51 which discusses the I, B, and P frames used in the MPEG-2 standard format. The Office considers that Schumann teaches the inter-coded picture having no change information for blocks of the inter-coded picture corresponding to the predefined blocks, and having change information for selected blocks containing the thumbnail.” The Office also points to Schumann, col. 5, lines 1-24, which discloses initially an I-frame, representing background is provided to the output frame structure, and building a P-frame dynamically at the end user station onto the output frame.

Applicants respectfully point out that the cited section of Schumann does not disclose or suggest the recited change information of claim 1.

For example, Schumann, col. 4, lines 40-41 discloses a graphics element can be added to a background image either by an image replacement within an I frame or an image overlay. However, either case apparently describes displaying an I frame and a P-frame and overlaying the P-frame to the I-frame. Schumann, col. 3, lines 22-24 defines overlay as “areas overlapping the original image not covered by the graphics elements are encoded using transparency macroblocks.”

This section of Schumann discusses that within the P-frame, non-changed areas, such as areas overlaying the original image not covered by graphics elements, are encoded using transparency macroblocks, while the changed areas are encoded using intra-coded macroblocks. However, such frame appears to be an I-frame as per the MPEG-2 standard, because an I-frame “using only information present in the picture itself” (Schumann, col. 1, lines 37-38) whereas the P-frame “contains both intra-macroblocks. . .and inter-macroblocks. . . .” (col. 1, lines 43-44). In other words,

Schumann's discussion aligns with the purpose of overlaying an image to a previous I-frame, however, Schumann does not display the decoded P-frame according to the MPEG-2 standard.

Schumann, col. 5, lines 1-24 indicates that the I and P frames are wrapped within a DVD structure to facilitate display within a DVD player. However, this disclosure does not change the fact that the I and P frames are overlayed to each other as described repeatedly in Schumann. Thus, this portion of Schumann does not suggest the required change information of claim 1.

For the reasons explained above, Schumann does not disclose generating an inter-coded picture having no change information for blocks of the inter-coded picture corresponding to the predefined blocks, and having change information for selected blocks containing the thumbnail. Also as explained above, Frimout does not cure the deficiencies of Schumann with respect to claim 1. Accordingly, Applicants respectfully submit that the rejection of claim 1 under 35 U.S.C. §103(a) has been traversed.

Furthermore, as noted above, Frimout, col. 1, lines 52-58 teaches when a recording is added to a disc, a completely newly coded picture for the menu is stored. This appears to correspond to the image replacement of Schumann, col. 4, lines 40-41, as discussed above.

The combination of Frimout and Schumann results in:

- storing a replacement image (a complete new I-frame) on a disc (Frimout), and
- storing the I-frame and Schumann's "P-frame" for overlay on the I-frame.

Although the combination of Frimout and Schumann teaches overlaying stored images, Frimout and Schumann, singly or in combination, does not suggest the change information as recited in claim 1. Therefore, withdrawal of the rejection to claims 2-5 and 11 under 35 U.S.C. § 103(a) and early allowance of the claims is respectfully requested.

Dependent claims 2-5 and 11 depend ultimately upon allowable claim 1. Each dependent claim incorporates all of the respective features of claim 1, from which they depend, in addition to containing further distinguishing patentable features. Therefore,

for at least the same reasons discussed above with respect to claim 1, the combination of Schumann and Frimout does not teach or even suggest all the features of claims 2-5 and 11. Accordingly, withdrawal of the rejection to claims 2-5 and 11 under 35 U.S.C. § 103(a) and early allowance of the claims is respectfully requested.

Conclusion

Having fully addressed the Examiner's rejections it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the Applicants' attorney at (973) 401-7157, so that a mutually convenient date and time for a telephone interview may be scheduled.

Please charge any required additional fee or credit any overpayment to Deposit Account No. 07-0832.

Respectfully submitted,
Cheng Tao, et al.

By: /Hay Yeung Cheung/
Hay Yeung Cheung
Attorney for Applicants
Registration No. 56,666

CUSTOMER NUMBER 72109
Myers Wolin, LLC
Telephone: (973) 401-7157
July 14, 2011